STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: __

Source:

Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

- PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
 U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/551, 300
ATTN: NEW RULES CASES	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5^{th} amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6Patentin 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)
Use of <220>	Sequence(s)missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <13> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules.
Patentin 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

AMC - STIC Systems Branch - 03/02/06



IPWP

RAW SEQUENCE LISTING DATE: 06/20/2006
PATENT APPLICATION: US/10/551,300 TIME: 12:03:24

Input Set : E:\SEQLIST.TXT

Output Set: N:\CRF4\06202006\J551300.raw

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     6 <120> TITLE OF INVENTION: TARGETING ENZYMES OF THE tRNA SPLICING
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     7
            ANTI-PROLIFERATIVE MOLECULES
    10 <130> FILE REFERENCE: 10589-034-999
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/551,300
C--> 13 <141> CURRENT FILING DATE: 2005-09-27
    15 <150> PRIOR APPLICATION NUMBER: PCT/US2004/009590
                                                                Does Not Comply
                                                                Corrected Diskette Needed
    16 <151> PRIOR FILING DATE: 2004-03-26
    18 <150> PRIOR APPLICATION NUMBER: 60/458,067
    19 <151> PRIOR FILING DATE: 2003-03-27
    21 <160> NUMBER OF SEQ ID NOS: 4
    23 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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    37
                   20
                                       25
    38 Pro Leu Lys Glu Phe Lys Ile Phe Arg Ala Glu Met Ile Asn Asn Asn
    39
             35
                                   40
    40 Val Ile Val Arg Asn Ala Glu Asp Ile Glu Gln Leu Tyr Gly Lys Gly
    41
         50
                               55
                                                   60
    42 Tyr Phe Gly Lys Gly Ile Leu Ser Arg Ser Arg Pro Ser Phe Thr Ile
                           70
                                               75
    43 65
    44 Ser Asp Pro Lys Leu Val Ala Lys Trp Lys Asp Met Lys Thr Asn Met
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                      85
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    46 Pro Ile Ile Thr Ser Lys Arg Tyr Gln His Ser Val Glu Trp Ala Ala
    47
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                                       105
                                                           110
    48 Glu Leu Met Arg Arg Gln Gly Gln Asp Glu Ser Thr Val Arg Arg Ile
    49
              115
                                   120
                                                       125
    50 Leu Lys Asp Tyr Thr Lys Pro Leu Glu His Pro Pro Val Lys Arg Asn
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                                                   140
          130
    52 Glu Glu Ala Gln Val His Asp Lys Leu Asn Ser Gly Met Val Ser Asn
    53 145
                          150
                                              155
    54 Met Glu Gly Thr Ala Gly Glu Arg Pro Ser Val Val Asn Gly Asp
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                       165
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    56 Ser Gly Lys Ser Gly Gly Val Gly Asp Pro Arg Glu Pro Leu Gly Cys
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6/20/2006

RAW SEQUENCE LISTING DATE: 06/20/2006 PATENT APPLICATION: US/10/551,300 TIME: 12:03:24

Input Set : E:\SEQLIST.TXT

Output Set: N:\CRF4\06202006\J551300.raw

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60 Ser Val Arg Glu Asp Ala Ser Pro Leu Pro His Val Cys Cys Cys Lys
61 210
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62 Gln Asp Ala Leu Ile Leu Gln Arg Gly Leu His His Glu Asp Gly Ser
                  230
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64 Gln His Ile Gly Leu Leu His Pro Gly Asp Arg Gly Pro Asp His Glu
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                                                   255
66 Tyr Val Leu Val Glu Glu Ala Glu Cys Ala Met Ser Glu Arg Glu Ala
                                               270
            260
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68 Ala Pro Asn Glu Glu Leu Val Gln Arg Asn Arg Leu Ile Cys Arg Arg
69 275
                          280
70 Asn Pro Tyr Arg Ile Phe Glu Tyr Leu Gln Leu Ser Leu Glu Glu Ala
               295
                              300
72 Phe Phe Leu Val Tyr Ala Leu Gly Cys Leu Ser Ile Tyr Tyr Glu Lys
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74 Glu Pro Leu Thr Ile Val Lys Leu Trp Lys Ala Phe Thr Val Val Gln
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75 325
76 Pro Thr Phe Arg Thr Thr Tyr Met Ala Tyr His Tyr Phe Arg Ser Lys
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                                            350
78 Gly Trp Val Pro Lys Val Gly Leu Lys Tyr Gly Thr Asp Leu Leu Leu
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80 Tyr Arg Lys Gly Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile Ile
81 370
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82 Glu Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser
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83 385 390
84 Trp Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser Lys
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86 Glu Leu Met Leu Cys Tyr Leu Ile Lys Pro Ser Thr Met Thr Asp Lys
87
          420
                             425
88 Glu Met Glu Ser Pro Glu Cys Met Lys Arg Ile Lys Val Gln Glu Val
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90 Ile Leu Ser Arg Trp Val Ser Ser Arg Glu Arg Ser Asp Gln Asp Asp
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92 Leu
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107 Glu Thr Tyr Glu Ser Pro Leu Pro Ile Pro Phe Gly Gln Asp His Gly
108 20
                              25
109 Pro Leu Lys Glu Phe Lys Ile Phe Arg Ala Glu Met Ile Asn Asn Asn
```

PATENT APPLICATION: US/10/551,300 DATE: 06/20/2006 TIME: 12:03:24

Input Set : E:\SEQLIST.TXT

Output Set: N:\CRF4\06202006\J551300.raw

110																	
113	110			35			_		40				_	45	-3	-	~3
Try Phe Gly Lys Gly Ile Leu Ser Arg Ser Arg Pro Ser Phe Thr Ile 114 65 70 115 Ser Asp Pro Lys Leu Val Ala Lys Trp Lys Asp Met Lys Thr Asn Met 116 117 Pro Ile Ile Thr Ser Lys Arg Tyr Gln His Ser Val Glu Trp Ala Ala 118 119 Glu Leu Met Arg Arg Gln Gly Gln Asp Glu Ser Thr Val Arg Arg Ile 120 115 121 Leu Lys Asp Tyr Thr Lys Pro Leu Glu His Pro Pro Val Lys Arg Asn 123 Glu Glu Ala Gln Val His Asp Lys Leu Asn Ser Gly Met Val Ser Asn 124 145 126 127 Ser Gly Iys Ser Gly Gly Val Gly Asp Pro Arg Glu Pro Leu Gly Cys 128 129 Leu Gln Glu Gly Ser Gly Gly Val Gly Asp Pro Arg Glu Pro Leu Gly Cys 130 131 Ser Val Arg Glu Asp Ala Ser Pro Leu Ser Pro Thr Thr Glu Ser Phe Glu Lys 132 210 133 Gln Asp Ala Leu Ile Leu Gln Arg Gly Leu His His Glu Asp Gly Ser 134 225 135 Gln His Ile Gly Leu Leu His Pro Gly Asp Arg Gly Pro Asp His Glu 136 137 Tyr Val Leu Val Glu Glu Glu Ala Glu Cys 138 Gln Asp Ala Leu Ile Leu Gln Arg Gly Leu His His Glu Asp Gly Ser 139 Ala Pro Asn Glu Glu Leu Val Glu Ala Glu Cys 139 Ala Pro Asn Glu Glu Leu Val Glu Arg Arg Arg Leu Ile Cys Arg Arg 139 Ala Pro Asn Glu Glu Leu Val Glu Arg Arg Arg Arg Leu Ile Cys Arg Arg 140 275 141 Asn Pro Tyr Arg Ile Phe Glu Tyr Leu Gln Leu Ser Leu Glu Glu Glu 143 Fro Leu Thr Ile Val Lys Leu Trp Lys Ala Phe Thr Val Val Glu Glu 140 305 147 Trp Val Pro Lys Val Gly Leu Lys Tyr Gly Thr Asp Leu Leu Leu Tyr 148 305 149 Arg Lys Gly Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile Ile Glu 150 305 151 Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser Trp 152 370 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Ser Val Ser Lys Glu 154 385 155 400 156 400 157 500 157 500 158 140 159 140 150	111	Val	Ile	Val	Arg	Asn	Ala		Asp	Ile	Glu	Gin		Tyr	GIÀ	rås	GIA
114 65										_	_	_		_		_	
115 Ser Asp Pro Lys Leu Val Ala Lys Trp Lys Asp Met Lys Thr Asn Met 166	113	Tyr	Phe	Gly	Lys	Gly		Leu	Ser	Arg	Ser		Pro	Ser	Pne	Thr	
116	114	65						_		_	_			_		_	
117	115	Ser	Asp	Pro	Lys	Leu	Val	Ala	Lys	Trp		Asp	Met	Lys	Thr	Asn	Met
118	116									_		_			_		
119 Glu Leu Met Arg Arg Gln Gly Gln Asp Glu Ser Thr Val Arg Arg Ile 120	117	Pro	Ile	Ile	Thr	Ser	Lys	Arg	Tyr	Gln	His	Ser	Val	Glu	Trp	Ala	Ala
115	118							_			_	_				_	
121 Leu Lys Asp Tyr Thr Lys Pro Leu Glu His Pro Pro Val Lys Arg Ash 122 130 135 140 135 140 140 135 140 135 140 140 135 140 140 135 140 140 135 140 140 140 135 140	119	Glu	Leu		Arg	Arg	Gln	Gly		Asp	GIA	ser	Thr		Arg	Arg	116
130	120			115							•	_	_		_	•	
123 Glu Glu Ala Gln Val His Asp Lys Leu Asn Ser Gly Met Val Ser Asn 150 150 155 155 150 160 160 165 170 175	121	Leu		Asp	Tyr	Thr	Lys		Leu	GLu	H18	Pro	PTO	vai	rås	Arg	Asn
124 145							•			•				**	**- 1	~	
125 Met Glu Gly Thr Ala Gly Gly Glu Arg Pro Ser Val Val Asn Gly Asp 126			Glu	Ala	Gln	Val		Asp	Lys	Leu	Asn		GIÀ	Met	val	ser	
165	124	145	_							_	_		•••	••- •	•	43	
127 Ser Gly Lys Ser Gly Gly Val Gly Asp Pro Arg Glu Pro Leu Gly Cys 128	125	Met	Glu	Gly	Thr	Ala	GIÅ	GIA	GLU	Arg	Pro	ser	vaı	Val	Asn	GTA	Asp
180				_	_				~ 3			-	~1	D	T		<i>-</i>
129 Leu Gln Glu Gly Ser Gly Cys His Pro Thr Thr Glu Ser Phe Glu Lys 130		Ser	Gly	Lys		GIY	GTÅ	val	GTĀ		Pro	Arg	GIU	PIO		GTÅ	Cys
130		_					~ 3	a	***		FF110	mb	~1	Com		c1	T
131 Ser Val Arg Glu Asp Ala Ser Pro Leu Pro His Val Cys Cys Cys Lys 132 210 215 220 133 Gln Asp Ala Leu Ile Leu Gln Arg Gly Leu His His Glu Asp Gly Ser 134 225 230 235 240 135 Gln His Ile Gly Leu Leu His Pro Gly Asp Arg Gly Pro Asp His Glu 136 245 250 137 Tyr Val Leu Val Glu Glu Ala Glu Cys Ala Met Ser Glu Arg Glu Ala 138 260 265 270 139 Ala Pro Asn Glu Glu Leu Val Gln Arg Asn Arg Leu Ile Cys Arg Arg 140 275 280 141 Asn Pro Tyr Arg Ile Phe Glu Tyr Leu Gln Leu Ser Leu Glu Glu Glu 142 290 295 300 143 Pro Leu Thr Ile Val Lys Leu Trp Lys Ala Phe Thr Val Val Gln Pro 144 305 310 315 145 Thr Phe Arg Thr Thr Tyr Met Ala Tyr His Tyr Phe Arg Ser Lys Gly 146 325 325 330 335 147 Trp Val Pro Lys Val Gly Leu Lys Tyr Gly Thr Asp Leu Leu Leu Tyr 148 340 340 345 149 Arg Lys Gly Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile Ile Glu 150 355 360 365 151 Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser Trp 152 370 380 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser Lys Glu 154 Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser Lys Glu 155 Ser Arg Val Ser Val Asn Val Ser Lys Glu 155 Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser Lys Glu 155 Ser Arg Val Ser Val Asn Val Ser Lys Glu		Leu	GIN		GIY	ser	GIA	Cys		Pro	THE	THE	GIU		Pne	GIU	гув
132			••- 3		63		37.	C		tau	D	u: c	1701		Cva	Cve	Tare
133 Gln Asp Ala Leu Ile Leu Gln Arg Gly Leu His His Glu Asp Gly Ser 134 225 230 235 240 135 Gln His Ile Gly Leu Leu His Pro Gly Asp Arg Gly Pro Asp His Glu 136 245 250 255 137 Tyr Val Leu Val Glu Glu Ala Glu Cys Ala Met Ser Glu Arg Glu Ala 138 260 265 270 139 Ala Pro Asn Glu Glu Leu Val Gln Arg Asn Arg Leu Ile Cys Arg Arg 140 275 280 285 141 Asn Pro Tyr Arg Ile Phe Glu Tyr Leu Gln Leu Ser Leu Glu Glu Glu 142 290 295 300 143 Pro Leu Thr Ile Val Lys Leu Trp Lys Ala Phe Thr Val Val Gln Pro 144 305 310 315 320 145 Thr Phe Arg Thr Thr Tyr Met Ala Tyr His Tyr Phe Arg Ser Lys Gly 146 325 330 335 147 Trp Val Pro Lys Val Gly Leu Lys Tyr Gly Thr Asp Leu Leu Leu Tyr 148 340 345 350 149 Arg Lys Gly Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile Ile Glu 150 355 360 151 Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser Trp 152 370 375 380 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser Lys Glu 154 385 400	131	ser		arg	GIA	Asp	ALA		PLO	ren	PIO	UIS		Cys	Сув	cys	Бåв
134 225 230 235 240 135 Gln His Ile Gly Leu Leu His Pro Gly Asp Arg Gly Pro Asp His Glu 245 250 250 255 137 Tyr Val Leu Val Glu Glu Glu Glu Ala Glu Cys Ala Met Ser Glu Arg Glu Ala 260 265 265 270 139 Ala Pro Asn Glu Glu Glu Leu Val Gln Arg Asn Arg Leu Ile Cys Arg Arg 140 275 280 285 141 Asn Pro Tyr Arg Ile Phe Glu Tyr Leu Gln Leu Ser Leu Glu Glu Glu 142 290 295 300 143 Pro Leu Thr Ile Val Lys Leu Trp Lys Ala Phe Thr Val Val Gln Pro 144 305 310 310 145 Thr Phe Arg Thr Thr Tyr Met Ala Tyr His 330 330 335 147 Trp Val Pro Lys Val Gly Leu Lys Tyr Gly Thr Asp Leu Leu Leu Tyr 335 148 340 345 345 350 149 Arg Lys Gly Pro Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile Ile Glu 365 365 151 Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser Trp 375 360 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser Lys Glu 400	132	~1 ~			T	T1-	7		2~~	Clar	T au	uic		Glu	Aen	G117	Cor
135 Gln His Ile Gly Leu Leu His Pro Gly Asp Arg Gly Pro Asp His Glu 136			Авр	ATA	rea	TTE			Mrg	GLY	Deu		nro	GIU	vob	Gry	
136 245 250 255 137 Tyr Val Leu Val Glu Glu Glu Glu Ala Glu Cys Ala Met Ser Glu Arg Glu Ala 260 265 265 270 270 139 Ala Pro Asn Glu Glu Glu Leu Val Gln Arg Asn Arg Leu Ile Cys Arg Arg 270 280 285 285 287 28	134	223	774.	710	C110	T 011			Dro	alv	Aen		മാം	Pro	Aan	His	
137 Tyr Val Leu Val Glu Glu Ala Glu Cys Ala Met Ser Glu Arg Glu Ala 138		GIII	uis	TTE	GTÅ		nen	HIP	FIO	GLY		nr 9	orl	•••	nop		V -u
138 260 265 270 139 Ala Pro Asn Glu Glu Glu Leu Val Gln Arg Asn Arg Leu Ile Cys Arg Arg 280 285 141 Asn Pro Tyr Arg Ile Phe Glu Tyr Leu Gln Leu Ser Leu Glu Glu Glu 285 141 Asn Pro Tyr Arg Ile Phe Glu Tyr Leu Gln Leu Ser Leu Glu Glu Glu 300 142 290 295 300 143 Pro Leu Thr Ile Val Lys Leu Tyr Lys Ala Phe Thr Val Val Gln Pro 300 144 305 310 315 320 145 Thr Phe Arg Thr Thr Tyr Met Ala Tyr His Tyr Phe Arg Ser Lys Gly 320 145 Thr Phe Arg Thr Thr Tyr Met Ala Tyr His Tyr Phe Arg Ser Lys Gly 335 147 Trp Val Pro Lys Val Gly Leu Lys Tyr Gly Thr Asp Leu Leu Leu Tyr 148 340 345 355 149 Arg Lys Gly Pro Pro Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile Ile Glu 150 355 360 365 151 Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser Trp 152 370 375 380 153 Lys Glu Ala Ala Leu Ser Arg Val Ser Val Asp Val Ser Lys Glu 154 385 390	130		17-1	7 011	1/-1		Glu	בומ	61 11	Cva		Mor	Ser	Glu	Ara		Ala
139 Ala Pro Asn Glu Glu Leu Val Gln Arg Asn Arg Leu Ile Cys Arg Arg 140		TÄT	val	neu		GIU	GIU	ALG	014		****						
140 275 280 285 285 141 Asn Pro Tyr Arg 11e Phe Glu Tyr Leu Gln Leu Glu Fro Glu Glu Fro Glu Fro Glu Fro Glu Fro Glu Fro F		Δla	Dro	Men		Glu	ī.eu	Va l	Gln		Asn	Ara	Leu	Ile	Cvs	Ara	Ara
141 Asn Pro Tyr Arg Ile Phe Glu Tyr Leu Gln Leu Glu Fro Glu Glu Fro Glu Fro Glu Glu Fro F		MIG	210		414	414									72 ~	3	J
142 290 295 300 143 Pro Leu Thr Ile Val Lys Leu Trp Lys Ala Phe Thr Val Val Gln Pro 144 305 310 315 320 145 Thr Phe Arg Thr Thr Tyr Met Ala Tyr His Tyr Phe Arg Ser Lys Gly 320 146 325 330 335 147 Trp Val Pro Lys Val Gly Leu Lys Tyr Gly Thr Asp Leu Leu Leu Tyr 148 340 345 345 149 Arg Lys Gly Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile Ile Glu 150 355 360 151 Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser Trp 152 370 375 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser Lys Glu 154 385 390		Δan	Pro		Ara	Tle	Phe	Glu		Leu	Gln	Leu	Ser	Leu	Glu	Glu	Glu
143 Pro Leu Thr Ile Val Lys Leu Trp Lys Ala Phe Thr Val Gln Pro 144 305 310 315 320 145 Thr Phe Arg Thr Thr Tyr Met Ala Tyr His Tyr Phe Arg Ser Lys Gly 146 325 330 335 335 335 335 335 335 355 350 40 14 Arg Lys Gly Pro Pro Phe Tyr His Ala Ser Tyr Ser Leu Leu Leu Tyr 149 Arg Lys Gly Pro Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile Ile Glu 150 355 360 360 365 365 365 365 365 360 365 360 360 380 380 380 380 380 380 380 <td></td> <td></td> <td></td> <td>-2-</td> <td>5</td> <td></td> <td></td> <td></td> <td>•</td> <td></td> <td>- "</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>				-2-	5				•		- "						
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146 325 330 335 147 Trp Val Pro Lys Val Gly Leu Lys Tyr Gly Thr Asp Leu Leu Leu Tyr 148 340 345 350 149 Arg Lys Gly Pro Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile Ile Glu 350 150 355 360 365 151 Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser Trp 360 152 370 375 380 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asp Val Ser Lys Glu 154 385 390 395									-	•							320
146 325 330 335 147 Trp Val Pro Lys Val Gly Leu Lys Tyr Gly Thr Asp Leu Leu Leu Tyr 148 340 345 350 149 Arg Lys Gly Pro Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile Ile Glu 350 150 355 360 365 151 Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser Trp 360 152 370 375 380 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asp Val Ser Lys Glu 154 385 390 395	145	Thr	Phe	Arg	Thr	Thr	Tyr	Met	Ala	Tyr	His	Tyr	Phe	Arg	Ser	Lys	Gly
148 340 345 350 149 Arg Lys Gly Pro Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile Ile Glu 150 355 360 365 151 Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser Trp 152 370 375 380 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asp Val Ser Lys Glu 154 385 390 395				_			-										
148 340 345 350 149 Arg Lys Gly Pro Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile Ile Glu 150 355 360 365 151 Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser Trp 152 370 375 380 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asp Val Ser Lys Glu 154 385 390 395	147	Trp	Val	Pro	Lys	Val	Gly	Leu	Lys	Tyr	Gly	Thr	Asp	Leu	Leu	Leu	Tyr
150 355 360 365 151 Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser Trp 152 370 375 380 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser Lys Glu 154 385 390 395 400	148	-			340					345					350		
150 355 360 365 151 Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu Ser Trp 152 370 375 380 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser Lys Glu 154 385 390 395 400	149	Arg	Lys	Gly	Pro	Pro	Phe	Tyr	His	Ala	Ser	Tyr	Ser	Val	Ile	Ile	Glu
152 370 375 380 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser Lys Glu 154 385 390 395 400		_	_														
152 370 375 380 153 Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser Lys Glu 154 385 390 395 400	151	Leu	Val	Asp	Asp	His	Phe	Glu	Gly	Ser	Leu	Arg	Arg	Pro	Leu	Ser	Trp
154 385 390 395 400				•	_												
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155 Leu Met Leu Cys Tyr Leu Ile Lys Pro Ser Thr Met Thr Asp Lys Glu	154	385					390					395					400
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156 405 410 415	156					405					410					415	
157 Met Glu Ser Pro Glu Cys Met Lys Arg Ile Lys Val Gln Glu Val Ile		Met	Glu	Ser		Glu	Cys	Met	Lys		Ile	Lys	Val	Gln		Val	Ile
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RAW SEQUENCE LISTING DATE: 06/20/2006 PATENT APPLICATION: US/10/551,300 TIME: 12:03:24

Input Set : E:\SEQLIST.TXT

Output Set: N:\CRF4\06202006\J551300.raw

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168 <220> FEATURE:
169 <223> OTHER INFORMATION: Sc Sen2p
171 <400> SEQUENCE: 3
172 Met Ser Lys Gly Arg Val Asn Gln Lys Arg Tyr Lys Tyr Pro Leu Pro
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173 1
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174 Ile His Pro Val Asp Asp Leu Pro Glu Leu Ile Leu His Asn Pro Leu
175 20
                               25
176 Ser Trp Leu Tyr Trp Ala Tyr Arg Tyr Tyr Lys Ser Thr Asn Ala Leu
177 35
                           40
178 Asn Asp Lys Val His Val Asp Phe Ile Gly Asp Thr Thr Leu His Ile
179 50
             55
180 Thr Val Gln Asp Asp Lys Gln Met Leu Tyr Leu Trp Asn Asn Gly Phe
                    70
                                    75
181 65
182 Phe Gly Thr Gly Gln Phe Ser Arg Ser Glu Pro Thr Trp Lys Ala Arg
                85 ·
                                 90
                                                    95
183
184 Thr Glu Ala Arg Leu Gly Leu Asn Asp Thr Pro Leu His Asn Arg Gly
185 '' 100
                              105
186 Gly Thr Lys Ser Asn Thr Glu Thr Glu Met Thr Leu Glu Lys Val Thr
                           120
                                       125
187 115
188 Gln Gln Arg Arg Leu Gln Arg Leu Glu Phe Lys Lys Glu Arg Ala Lys
                                         140
                     135
189 130
190 Leu Glu Arg Glu Leu Leu Glu Leu Arg Lys Lys Gly Gly His Ile Asp
          150
                                     155
191 145
192 Glu Glu Asn Ile Leu Leu Glu Lys Gln Arg Glu Ser Leu Arg Lys Phe
                                                    175
193
                 165
                                  170
194 Lys Leu Lys Gln Thr Glu Asp Val Gly Ile Val Ala Gln Gln Gln Asp
            180
                              185
                                                 190
195
196 Ile Ser Glu Ser Asn Leu Arg Asp Glu Asp Asn Asn Leu Leu Asp Glu
197 195
                           200
198 Asn Gly Asp Leu Leu Pro Leu Glu Ser Leu Glu Leu Met Pro Val Glu
                                         220
              215
199 210
200 Ala Met Phe Leu Thr Phe Ala Leu Pro Val Leu Asp Ile Ser Pro Ala
                                      235
           230
201 225
202 Cys Leu Ala Gly Lys Leu Phe Gln Phe Asp Ala Lys Tyr Lys Asp Ile
                                   250
                245
203
204 His Ser Phe Val Arg Ser Tyr Val Ile Tyr His His Tyr Arg Ser His
205 260
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                                               270
206 Gly Trp Cys Val Arg Ser Gly Ile Lys Phe Gly Cys Asp Tyr Leu Leu
207 275
                          280
208 Tyr Lys Arg Gly Pro Pro Phe Gln His Ala Glu Phe Cys Val Met Gly
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                                         300
209 290
210 Leu Asp His Asp Val Ser Lys Asp Tyr Thr Trp Tyr Ser Ser Ile Ala
211 305
                    310
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RAW SEQUENCE LISTING DATE: 06/20/2006
PATENT APPLICATION: US/10/551,300 TIME: 12:03:24

Input Set : E:\SEQLIST.TXT

٠,٠.

Output Set: N:\CRF4\06202006\J551300.raw

212 Arg Val Val Gly Gly Ala Lys Lys Thr Phe Val Leu Cys Tyr Val Glu 330 325 214 Arg Leu Ile Ser Glu Gln Glu Ala Ile Ala Leu Trp Lys Ser Asn Asn 340 345 . 350 215 216 Phe Thr Lys Leu Phe Asn Ser Phe Gln Val Gly Glu Val Leu Tyr Lys 217 355 360 218 Arg Trp Val Pro Gly Arg Asn Arg Asp 219 370 222 <210> SEQ ID NO: 4 223 <211> LENGTH: 5 -> Invalid Response.

what is the Source
of genetic Material?

Pls See Glern ## 11

on Error Summary 224 <212> TYPE: PRT 225 <213> ORGANISM: Artificial Sequence 227 <220> FEATURE: 228 <223> OTHER INFORMATION: Motif 230 <400> SEQUENCE: 4 231 Tyr Arg Gly Gly Tyr 232 1

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/551,300

DATE: 06/20/2006
TIME: 12:03:25

Input Set : E:\SEQLIST.TXT

Output Set: N:\CRF4\06202006\J551300.raw

L:12 M:270 C: Current Application Number differs, Replaced Application Number L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date